OIPE

RAW SEQUENCE LISTING DATE: 09/07/2001 PATENT APPLICATION: US/09/486,882 TIME: 16:53:59

Input Set : N:\Crf3\08132001\1486882.raw
Output Set: N:\CRF3\09072001\1486882.raw

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1 <110> APPLICANT: Rowett Research Institute Services limited
      2 <120> TITLE OF INVENTION: Chimeric binding peptide library screening method
      3 <130> FILE REFERENCE: P22410-/scr/bou
      4 <140> CURRENT APPLICATION NUMBER: US/09/486,882
C--> 5 <141> CURRENT FILING DATE: 2000-02-03
                                                             ENTERED
      6 <160> NUMBER OF SEQ ID NOS: 78
      7 <170> SOFTWARE: PatentIn Ver. 2.0
      9 <210> SEQ ID NO: 1
     10 <211> LENGTH: 521
     11 <212> TYPE: DNA
     12 <213> ORGANISM: Recombinant human oestrogen
     13 <220> FEATURE:
     14 <221> NAME/KEY: CDS
     15 <222> LOCATION: (41)..(475)
     16 <400> SEQUENCE: 1
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     17
                                                          Met Lys Tyr Leu Leu
     18
     19
              cct acg gca gcc gct gga ttg tta tta ctc gcg gcc cag ccg gcc atg
                                                                                 103
     20
              Pro Thr Ala Ala Ala Gly Leu Leu Leu Ala Ala Gln Pro Ala Met
     22
     23
              gcc caa gtg cag ctg cag taa tag gcg gcc gca ggg gga gga ggg tcc
     24
              Ala Gln Val Gln Leu Gln
                                              Ala Ala Ala Gly Gly Gly Ser
W--> 25
                           25
                                               30
              atg gaa tot goo aag gag act ogo tao tgt goa gtg tgo aat gao tat
                                                                                 199
     26
              Met Glu Ser Ala Lys Glu Thr Arg Tyr Cys Ala Val Cys Asn Asp Tyr
     27
W--> 28
                                           45
              gct tca ggc tac cat tat gga gtc tgg tcc tgt gag ggc tgc aag gcc
                                                                                 247
     29
              Ala Ser Gly Tyr His Tyr Gly Val Trp Ser Cys Glu Gly Cys Lys Ala
     30
                                       60
W--> 31
                                                                                 295
              tto tto aag aga agt att caa gga cat aac gac tat atg tgt cca gcc
     32
              Phe Phe Lys Arg Ser Ile Gln Gly His Asn Asp Tyr Met Cys Pro Ala
     33
                                   75
                                                        80
                                                                                 343
              acc aac cag tgc acc att gat aaa aac agg agg aag agc tgc cag gcc
     35
     36
              Thr Asn Gln Cys Thr Ile Asp Lys Asn Arg Arg Lys Ser Cys Gln Ala
    37
                                                                                 391
              tgc cgg ctc cgt aaa tgc tac gaa gtg gga atg atg aaa ggt ggg ata
     38
              Cys Arg Leu Arg Lys Cys Tyr Glu Val Gly Met Met Lys Gly Gly Ile
     39
                                               110
W--> 40
                          105
              cga aaa gac cga aga ggg aga atg ttg aaa cac aag cgc cag aga
                                                                                 439
     41
     42
              Arg Lys Asp Arg Arg Gly Gly Arg Met Leu Lys His Lys Arg Gln Arg
                                          125
                      120
    43
              gat gat ggg gag ggc agg ggt gaa gtg ggg tct tga taatcaggtc
                                                                                 485
     44
              Asp Asp Gly Glu Gly Arg Gly Glu Val Gly Ser
     45
                                                           145
                                      140
W - - > 46
                                                                                 521
              agagtgacct gagctaaaat aacacattca gaattc
     47
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DATE: 09/07/2001 TIME: 16:53:59

PATENT APPLICATION: US/09/486,882

RAW SEQUENCE LISTING

Input Set : N:\Crf3\08132001\1486882.raw
Output Set: N:\CRF3\09072001\1486882.raw

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50 <211> LENGTH: 27
51 <212> TYPE: PRT
52 <213> ORGANISM: Recombinant human oestrogen
53 <400> SEQUENCE: 2
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         Ala Gln Pro Ala Met Ala Gln Val Gln Leu Gln
56
57
59 <210> SEQ ID NO: 3
60 <211> LENGTH: 115
61 <212> TYPE: PRT
62 <213> ORGANISM: Recombinant human oestrogen
63 <400> SEQUENCE: 3
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65
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         Tyr Cys Ala Val Cys Asn Asp Tyr Ala Ser Gly Tyr His Tyr Gly Val
66
67
                      2.0
                                           2.5
68
         Trp Ser Cys Glu Gly Cys Lys Ala Phe Phe Lys Arg Ser Ile Gln Gly
69
                                       40
                                                           45
         His Asn Asp Tyr Met Cys Pro Ala Thr Asn Gln Cys Thr Ile Asp Lys
70
71
                                   55
72
         Asn Arg Arg Lys Ser Cys Gln Ala Cys Arg Leu Arg Lys Cys Tyr Glu
73
                              70
74
         Val Gly Met Met Lys Gly Gly Ile Arg Lys Asp Arg Arg Gly Gly Arg
75
76
         Met Leu Lys His Lys Arg Gln Arg Asp Asp Gly Glu Gly Arg Gly Glu
77
78
         Val Gly Ser
79
                 115
81 <210> SEQ ID NO: 4
82 <211> LENGTH: 102
83 <212> TYPE: DNA
84 <213> ORGANISM: human
85 <220> FEATURE:
86 <221> NAME/KEY: CDS
87 <222> LOCATION: (1)..(102)
88 <400> SEQUENCE: 4
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                                                                             48
89
         Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
90
91
         gag cag ttg aaa tct gga act gcc tct gtt gtg tgc ctg ctg aat aac
92
         Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
93
                                         25
                      20
94
                                                                             102
95
         ttc tat
         Phe Tyr
98 <210> SEQ ID NO: 5
99 <211> LENGTH: 34
100 <212> TYPE: PRT
101 <213> ORGANISM: human
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RAW SEQUENCE LISTING DATE: 09/07/2001 PATENT APPLICATION: US/09/486,882 TIME: 16:53:59

Input Set : N:\Crf3\08132001\1486882.raw
Output Set: N:\CRF3\09072001\1486882.raw

```
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          Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
103
104
                                                10
          Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
105
                                                                 30
106
                       20
                                            25
107
          Phe Tyr
109 <210> SEQ ID NO: 6
110 <211> LENGTH: 150
111 <212> TYPE: DNA
112 <213> ORGANISM: Human lymphocyte
113 <220> FEATURE:
114 <221> NAME/KEY: CDS
115 <222> LOCATION: (1)..(150)
116 <400> SEQUENCE: 6
117
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118
          Met Ala Gln Pro Thr Thr Arg Pro Gly Gln Gly Thr Arg Leu Asp Ile
119
                                                10
          aaa cga act gtg gct gca cca tct gtc ttc atc ttc ccg cca tct gat
                                                                              96
120
          Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
121
122
          gag cag ttg aaa tct gga act gcc tct gtt gtg tgc ctg ctg aat aac
123
124
          Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
125
126
          ttc tat
                                                                              150
          Phe Tyr
127
               50
128
130 <210> SEQ ID NO: 7
131 <211> LENGTH: 50
132 <212> TYPE: PRT
133 <213> ORGANISM: Human lymphocyte
134 <400> SEQUENCE: 7
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136
                                                10
          Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
137
                                            25
138
                       20
          Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
139
140
                   35
                                        40
141
          Phe Tyr
142
               50
144 <210> SEQ ID NO: 8
145 <211> LENGTH: 150
146 <212> TYPE: DNA
147 <213> ORGANISM: Human lymphocyte
148 <220> FEATURE:
149 <221> NAME/KEY: CDS
150 <222> LOCATION: (1)..(150)
151 <400> SEQUENCE: 8
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152
          Met Ala Gln Ser His His Ala Ser Gly Gly Gly Thr Lys Val Glu Ile
153
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Input Set : N:\Crf3\08132001\I486882.raw
Output Set: N:\CRF3\09072001\I486882.raw

	1.54		7				_					10					15		
	154		1				5					10							96
	155					gtg													90
•	156	1	ys	Arg	Thr	Val	Ala	Ата	Pro	ser		Phe	TTE	Pne	PIO	30	ser	ASP	
	157					20	4_4				25			+			+		1 4 4
	158	_	-	_	_	aaa													144
	159	G	μu	GIN		Lys	Ser	GIA	Thr		Ser	vaı	vaı	Cys		ьeu	ASII	ASI	
	160				35					40					45				150
	161			tat -															150
	162	F	he	Tyr															
	163			50		^													
	165 <210					9							•						
	166 <213								•										
			TYPE: PRT ORGANISM: Human lymphocyte																
						ıman	Τλω	phocy	yte										
	169 <400					_	•		_ •	_			~ 3	1	_		a 1	-1	
	170	M		Ala	Gln	Ser	_	His	Ala	Ser	GLY		GLY	Thr	Lys	vaı		IIe	
	171	_	1	_			- 5		_	_		10		-,			15	•	
	172	Ι	уys	Arg	Thr	Val	Ala	Ala	Pro	Ser		Phe	шe	Pne	Pro		Ser	Asp	
	173	_			_	20	_	~ 1		- 1	25	**- 1	**- 7	a	T	30	3	3	
	174	G	lu	Gln		Lys	Ser	GIY	Thr		Ser	val	vaı	Cys		ьeu	Asn	Asn	
	175	_		_	35					40					45				
	176	F	he	Tyr															
	177	_		50															
	179 <21																		
	180 <213																		
			TYPE: DNA ORGANISM: Recombinant human oestrogen																
						ecom	oinai	nt n	uman	oes	croge	∋n							
	183 <22																		
	184 <223							. .											
	185 <22						. (4/	٥)											
			SEQUENCE: 10 aagcttgcat gcaaattcta tttcaaggag acagtcata:									.+	2+4	222	t 2.0	at a	++~	55	
	187	c	ayı	July	cat	ycaa	acco	la l	LLCa	ayya	y aco	ay LC	ataa			Tyr			33
	188													1	цуз	TYT	"сч	5	
	189 190	_	. ~ +	200	œ æ a	gcc	aa+	aa -	++~	++=	++=	ct c	aca	_	car	cca	acc	_	103
	191					Ala													103
	192	-	10	1111	Ата	Ala	10	Gry	пси	шец	шеи	15	AIG	nia	OIII	110	20	1100	
	193	_		a a a	ata	caa		cac	taa	tan	aca		aca	aaa	aaa	aas		tcc	151
	194	_				Gln			caa	cag			Ala						131
W>		r	та	GIU	Val	25	пси	0111			30			011	011	35			
W>	196	=	tα	maa	tct	gcc	aarr	αaα	act	cac		tat	αca	ata	tac		gac	t.a.t.	199
	197					Ala													
W>		L	100	Oru	40	mu	טעם	OTU		45	-1-	0,10			50			-1-	
W>	199		rct	tca		tac	cat	tat	ααa		taa	tac	t.at	αασ		tac	aaσ	acc	247
	200					Tyr													
W>		-	a	55	CIY	- Y -	1113	- y -	60	·ul			~ ₁ 5	65	1	- 10	_, _		
M>	202	+	tc		aar	aga	aαt.	att		aas	cat	aac	gac		atσ	tat	cca	qcc	295
	203					Arg													
W>			70	1 110	Lys	9	001	75	0111	1			80	-1-		-10		85	
W >	204		, 0					, ,					0.0						

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Input Set : N:\Crf3\08132001\I486882.raw
Output Set: N:\CRF3\09072001\I486882.raw

```
acc aac cag tgc acc att gat aaa aac agg agg aag agc tgc cag gcc
                                                                                   343
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               Thr Asn Gln Cys Thr Ile Asp Lys Asn Arg Arg Lys Ser Cys Gln Ala
     206
W--> 207
               tgc cgg ctc cgt aaa tgc tac gaa gtg gga atg atg aaa ggt ggg ata
                                                                                   391
     208
               Cys Arg Leu Arg Lys Cys Tyr Glu Val Gly Met Met Lys Gly Gly Ile
     209
W--> 210
               cga aaa gac cga aga gga ggg aga atg ttg aaa cac aag cgc cag aga
     211
               Arg Lys Asp Arg Arg Gly Gly Arg Met Leu Lys His Lys Arg Gln Arg
     212
                                            125
W--> 213
               gat gat ggg gag ggc agg ggt gaa gtg ggg tct tga taatcaggtc
                                                                                   485
     214
               Asp Asp Gly Glu Gly Arg Gly Glu Val Gly Ser
     215
W--> 216
                                        140
                                                            145
               agagtgacct gagctaaaat aacacattca ggtcgacttg ggtcagtctg accgggacaa 545
     217
               agttaatgta acctcgaatt c
     218
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     221 <211> LENGTH: 27
     222 <212> TYPE: PRT
     223 <213> ORGANISM: Recombinant human oestrogen
     224 <400> SEQUENCE: 11
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                                                     10
     226
     227
               Ala Gln Pro Ala Met Ala Glu Val Gln Leu Gln
     228
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     231 <211> LENGTH: 115
     232 <212> TYPE: PRT
     233 <213> ORGANISM: Recombinant human oestrogen
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     235
     236
               Tyr Cys Ala Val Cys Asn Asp Tyr Ala Ser Gly Tyr His Tyr Gly Val
     237
     238
                            20
                                                 25
               Trp Ser Cys Glu Gly Cys Lys Ala Phe Phe Lys Arg Ser Ile Gln Gly
     239
     240
               His Asn Asp Tyr Met Cys Pro Ala Thr Asn Gln Cys Thr Ile Asp Lys
     241
     242
               Asn Arg Arg Lys Ser Cys Gln Ala Cys Arg Leu Arg Lys Cys Tyr Glu
     243
                                                         75
     244
                                     70
               Val Gly Met Met Lys Gly Gly Ile Arg Lys Asp Arg Arg Gly Gly Arg
     245
     246
     247
               Met Leu Lys His Lys Arg Gln Arg Asp Asp Gly Glu Gly Arg Gly Glu
                                                105
     248
                           100
     249
               Val Gly Ser
     250
                       115
     252 <210> SEQ ID NO: 13
     253 <211> LENGTH: 539
     254 <212> TYPE: DNA
     255 <213> ORGANISM: Recombinant human oestrogen
     256 <220> FEATURE:
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Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

DATE: 09/07/2001

TIME: 16:54:00

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/486,882

Input Set : N:\Crf3\08132001\I486882.raw
Output Set: N:\CRF3\09072001\I486882.raw

L:5 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:25 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1 L:28 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1 L:31 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1 L:34 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1 L:37 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1 L:40 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1 L:43 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1 L:46 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1 L:195 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:10 L:198 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:10 L:201 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:10 L:204 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:10 L:207 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:10 L:210 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:10 L:213 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:10 L:216 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:10 L:450 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:21 L:450 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:21 L:450 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21